

reference. In Seymour, the shaping surface areas 120 do not come close to the sheet of glass, as shown in Figure 17 of Seymour. Rather the shaping rails 124 push the softened glass upward in proximity to the shaping surface, as shown in Figure 18. The vacuum of Seymour is only used to maintain the sheet of glass against the shaping surface once the rail has lifted and shaped the glass. Claim 1 now states that the suction mold is lowered so that the shaping surface areas come close to the sheet of glass and further that the vacuums are developed to attract the sheet of glass against the shaping surface areas for bending the sheet of glass to follow the shaping surface areas. This is not done in Seymour, which utilizes the shaping rails to bend the glass, rather than utilizing a vacuum to attract the glass against the shaping surface areas. Applicants respectfully assert that claim 1, as submitted, patentably distinguishes over Seymour and any of the other cited references.

Claim 4 has now been amended to state that the method includes introducing a vacuum into one of the suction chambers to attract a first area of the sheet of glass against the shaping surface area of the suction chamber. At the same time as the first area of the sheet of glass is attracted, vacuum is introduced into another of the suction chambers to attract another area of the sheet of glass. As stated above, Seymour utilizes only attracting the central portion of glass. Seymour does not introduce the vacuum into another of the suction chambers to attract another area of the sheet of glass. Rather

Seymour utilizes shaping rings 124 to press the glass against the shaping surface and utilizes the vacuum in the end shaping surface area only to maintain the glass against the shaping surface area. With the attraction of the first area of the sheet of glass against the shaping surface area and at the same time introducing vacuum to another of the suction chambers to shape the glass, a much quicker shaping process is achieved.

Furthermore, this eliminates the delay which is achieved with Seymour and other methods wherein the first area is shaped, and then following a delay, the other areas on the sheet of glass are shaped, often adversely affecting the quality of the glass.

Applicants respectfully assert that claim 4 patentably distinguishes over Seymour and any combination with the other references.

Claim 2 has also been amended to state that a central area of the sheet of glass is attracted and then developing a vacuum in opposite side suction chambers to attract opposite side areas of the sheet of glass respectively against the curved shaping surface areas. As stated above, this provides speedy and high quality shaping. This operation is neither taught nor shown by Seymour or the other references.

Claim 3 is rejected under 35 U.S.C. § 103 as being unpatentable over Seymour taken with Nitschke. The Examiner stated that it would have been obvious to employ different vacuum levels in the chambers for avoiding negative curvature at the end portions as shown by Nitschke. As stated above, claims 1 and 2

have now been amended and are believed to distinguish over Seymour in view of Nitschke. It is believed that claim 3 is also allowable for these and additional reasons.

New claim 5 claims a ring mold supporting the sheet of glass maintained away from the curved shaping surfaces while vacuum is developed in side chambers, and the ends of the sheet of glass are pulled away from the ring mold. In the present invention, the vacuum attracts the glass to the curved shaping surfaces. The Seymour reference teaches that the shaping rails 124 support and push the glass against the shaping surfaces. This added step may adversely affect the quality of the shaping step. The present invention utilizes vacuum for attracting the glass and does not require that the ring molds support the glass, as is taught in Seymour. Applicants assert that claim 5 distinguishes over Seymour and any combination of the references.

Applicants assert that the application is now in condition for allowance. A speedy and favorable action on the merits is hereby requested. If the Examiner feels that a

telephone interview may be helpful in this matter, please contact applicants' representative, Curtis Hamre at (612) 336-4722.

Respectfully submitted,

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on January 6, 1995
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